EPI Update for Friday, February 8, 2008
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Histoplasmosis investigation update**
- **Influenza update: slight differences between strains and vaccine**
- **Flu terms and nomenclature for health care providers**
- **Decreasing health risks during international travel**
- **Meeting announcements and training opportunities**

Histoplasmosis investigation update
The investigation at Terrace Hill, the Governor's Mansion, continues. As of Wednesday night, 124 calls have come in to the public health call center from the public concerning the situation. Neither the epidemiologic, nor the environmental investigation have indicated that exposure to histoplasmosis occurred on any day other than Nov. 29, 2007. Initial epidemiologic information indicates the evening of the 29th as the most likely time of exposure. More than 185 persons have been interviewed and more than 100 have submitted samples for laboratory testing. Interviewing and analysis of data is ongoing and laboratory results are pending. Additional information can be found at www.idph.state.ia.us/common/press_releases/2008/080128_histoplasmosis.

Influenza update: slight differences between strains and vaccine
The Centers for Disease Control and Prevention (CDC) has reported slight differences between the dominant influenza AH3N2 strain and a major difference between the dominant B strain. The AH3 component in this year's vaccine is A/Wisconsin/67/2005-like. Some of the AH3 viruses characterized by CDC this year are A/Brisbane/10/2007-like, a variant of A/Wisconsin. AH3 is most common strain in Iowa right now. Since the A/Brisbane strain is only a variant this year's influenza vaccine, should provide adequate protection.

The dominant influenza B strain characterized by CDC is the B/Yamagata/16/88. The vaccine component is a B/Malaysia/2506/2004-like virus, belonging to the B/Victoria lineage. Since the dominant strain B/Yamagata is of another lineage, this year's vaccine will have reduced effectiveness but will still provide some protection. Influenza illness due to type B is milder than illness caused by A.

People should still get the influenza vaccine. There is plenty of vaccine available and it is not too late to be immunized. So far the majority of flu cases are being caused by strains that are a good match to the vaccine and it should provide some cross-protection against the new bug, too.

Overall, the influenza season has been mild in Iowa with no one age group affected more than another. To view the Iowa Influenza Surveillance Network weekly report, go to www.idph.state.ia.us/adper/iisn.asp.

Flu terms and nomenclature for health care providers

Interpreting flu terms and names is complex. However, it is important to understand the information provided by the Centers for Disease Control and Prevention (CDC). Below are a few terms included in the influenza update.

Antigenic characterization – a method used to describe influenza proteins neuraminidase (N) and hemagglutinnin (H) and how they have changed.
Antigenic variant – a term used to describe a slight change or drift in the genetic make-up of influenza proteins. An antigenic variant flu strain has slightly different surface proteins than known strains.
Drift – refers to small changes in the genetic composition of influenza proteins that continually happen over time.
Hemagglutinnin (H) – a surface protein on an influenza virus used to characterize a flu strain. There are 16 different H types. Some antiviral medications target this protein as a way to stop infection or lessen severity of infection.
Lineage – like a family tree; once a lineage is established, slight variations of the initial strain continue to be linked to that lineage. Most seasonal influenza strains that change from season to season stay within the same lineage for several years.
Neuraminidase (N) – a second viral protein used to characterize influenza viruses. There are nine different N types. This protein is also targeted by some antiviral medications to prevent illness or lessen the impact of infection.
Shift – refers to an abrupt, major change in either the H and/or H and N proteins of the influenza virus.

All flu strains are given a unique and revealing name. By understanding the way flu strains are named, you can gain valuable information about the strain.

Example: A/Brisbane/10/2007/H3N2

A	Type A influenza. There are three types of influenza: A, B, and C. A and B cause illness in people and C rarely does.
Brisbane	The location the strain was first identified. This strain of influenza was discovered in Brisbane, Australia.
10	The strain identification number.
2007	The year the strain was identified.
H3N2	The antigenic characterization of the H and N proteins.

Decreasing health risks during international travel

The increase in global travel makes us ever more mindful of the importance of staying healthy while traveling. CDC *Health Information for International Travel* (the Yellow Book) was developed to provide up-to-date and comprehensive information on immunization requirements and health recommendations to

protect and promote the health of international travelers. This resource is available at wwwn.cdc.gov/travel. If you are planning a trip overseas this resource will give you valuable information on required and recommended vaccines, items for a travelers health kit, including how to carry any prescription medications you may need to take with you and traveling safely with infants and children.

Meeting announcements and training opportunities

Laboratory Response Network Wet Workshop

These all day workshops are an opportunity for sentinel laboratorians to gain hands-on training in the recognition of possible select agents for more information visit www.uhl.uiowa.edu/educationoutreach/index.html-
May 28 - 29
Iowa Laboratory Facility
Ankeny Iowa

Have a healthy and happy week!

Center for Acute Disease Epidemiology
Iowa Department of Public Health
800-362-2736